ABSTRACT

Chemically amplified photoresists with reduced outgassing or no outgassing may be used in a vacuum environment of a lithography tool, such as an extreme ultraviolet lithography tool. A chemically amplified photoresist has a photoacid generator molecule. When the photoacid generator is irradiated, an acid is generated. The acid reacts with a protecting group in the photoresist to form an open-ring structure with reduced outgassing or no outgassing.